

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

✓



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/865,962	05/30/1997	JAKOB NIELSEN	2860-058	9129

22852 7590 10/06/2004

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
1300 I STREET, NW
WASHINGTON, DC 20005

EXAMINER

EDELMAN, BRADLEY E

ART UNIT PAPER NUMBER

2153

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	08/865,962	NIELSEN, JAKOB	
	Examiner	Art Unit	
	Bradley Edelman	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40,41 and 43-65 is/are pending in the application.
- 4a) Of the above claim(s) 48-52 and 59-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40,41,43-47 and 53-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Applicant's amendment and request for reconsideration filed on June 23, 2004. Claims 40, 41, 43-47, and 53-58 are presented for further examination. Claims 1-39 have been canceled, and claims 48-52 and 59-65 have been withdrawn from consideration as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 40, 41, 43-47, and 53-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dan et al. (U.S. Patent No. 5,802,301, hereinafter "Dan"), in view of Astle et al. (U.S. Patent No. 6,396,816, hereinafter "Astle"), and further in view of Vaid et al. (U.S. Patent No. 6,047,322, hereinafter "Vaid").

Note: The Vaid patent claims priority to a provisional application (No.

60/047,752), filed on May 27, 1997. A copy of the provisional application is included with this Office action.

In considering claim 40, Dan discloses a computer apparatus for allocating communications bandwidth, comprising:

A computer having a communications interface for sending information over a communication link (col. 4, line 34, "video file server 60"); and

A program running on said server to permit said computer to act as a server (inherent), the program when running, enabling the computer to reallocate bandwidth assigned to users (col. 4, lines 53-61, "REBALANCING EXISTING LOADS ON DISKS," wherein the disks initially reserve certain of their bandwidth to be allocated to users, and wherein that bandwidth is reallocated, or "rebalanced" when new user requests are received);

The computer reallocating bandwidth in response to a request for data ("NEW REQUEST") from one of the users over the communications interface (col. 4, lines 34-35, 42-47).

However, Dan fails to disclose that reallocation is based on a file attribute associated with the data requested in the request for data. This is because Dan only describes in depth a *video* file server for use with the bandwidth allocation system. However, Dan does suggest that the system can be used for "multimedia" files in general (see Abstract; Claims; col. 3, lines 50-52). Consequently, the use of bandwidth allocation schemes for servers that serve audio, video, and other types of files and data, and particularly the feature of allocating bandwidth according to a file attribute requested, is well known, as evidenced by Astle and Vaid respectively.

In a similar art, Astle discloses a bandwidth allocation system in a network, wherein bandwidth is allocated to system users according to the type of data requested (col. 7, lines 5-11, 20-26, wherein bandwidth is allocated according to "information type," and on "priority" according to the information type, - i.e. "bandwidth is allocated based on priority, namely in the following order: audio, control data and video"). Vaid then

teaches another bandwidth allocation system, wherein bandwidth is allocated not only according to data type, such as audio and video, but is further allocated based on file attributes, such as "MIME, HTML, JPEG, RealAudio, .WAV, .MOV," etc. (col. 5, line 66 – col. 6, line 10; col. 7, lines 18-40). Given the teachings of both Astle and Vaid, a person having ordinary skill in the art would have readily recognized the desirability and advantages of including audio, video, and various file-types of data in the server taught by Dan, and then allocating the server bandwidth in the system taught by Dan according to the file attributes associated with the data requested, to give users access to a wider array of information, and to more efficiently allocate available bandwidth to better support real-time, interactive communications, and to improve quality of service to users (see Astle, col. 2, lines 28-30; see also Vaid, col. 2, lines 54-67). Therefore, it would have been obvious to include audio, video, and different types of real-time (and non-real-time) files in the system taught by Dan, and to allocate bandwidth in the system taught by Dan according to the file attributes of the files requested, as disclosed by the combined teachings of Astle and Vaid.

In considering claim 41, as discussed with regard to claim 40, Astle discloses allocating bandwidth to users based on the types of data each is requesting from the server (col. 7, lines 5-11, 20-26, "allocated based on... audio, control data, and video"). In addition, Astle discloses that bandwidth is allocated to the users based on a number of users (col. 7, lines 5-11, 20-26, wherein bandwidth is allocated based on the number of users – i.e. dividing the remaining bandwidth "evenly among the terminals" requires

Art Unit: 2153

the knowledge of the number of terminals requesting data). Thus, it would have been obvious to a person having ordinary skill in the art to additionally allocate bandwidth in the system taught by Dan, Astle, and Vaid according to the number of users, to give users equal access to data, and to more efficiently allocate available bandwidth to better support real-time, interactive communications (see Astle, col. 2, lines 28-30).

In considering claim 43, Dan further discloses that the reallocation of bandwidth occurs in response to reception of a GET request over the communication interface (col. 4, lines 42-43, wherein the request is to access information in the server).

In considering claim 44, Astle further discloses that each type of data has an associated priority (col. 7, lines 7-11, "the remaining bandwidth is allocated based on priority, namely in the following order: audio, control data and video").

In considering claims 45 and 46, Dan further discloses detecting when a user is unable to receive information at a rate allocated to that user, and as a result, excluding that user from reallocation of available bandwidth (col. 5, lines 5-24, wherein if there is not enough bandwidth available to service the user's request, the user request is rejected and the user is excluded from obtaining reallocated bandwidth).

In considering claim 47, Dan further discloses that the bandwidth is reallocated dynamically (the sections cited above – col. 4, lines 34-61 – describe a dynamic process).

In considering claim 53, claim 53 presents a method for performing the same steps as claim 40, and is thus rejected for the same reasons.

In considering claim 54, claim 54 presents a method for performing the same steps as claim 41, and is thus rejected for the same reasons.

In considering claim 55, Dan further teaches that the reallocation occurs in response to the occurrence of an event (i.e. data request, col. 4, lines 41-44).

In considering claim 56, Astle further discloses that each type of data has an associated priority (col. 7, lines 7-11, “the remaining bandwidth is allocated based on priority, namely in the following order: audio, control data and video”).

In considering claim 57, Dan further discloses detecting when a process is unable to receive information at a rate allocated to that process, and as a result, excluding that process from reallocation of available bandwidth (col. 5, lines 5-24, wherein if there is not enough bandwidth available to service the user's request to

process information, the user request is rejected and the process is thus excluded from obtaining reallocated bandwidth).

In considering claim 58, Dan further discloses that the bandwidth is reallocated dynamically (the sections cited above – col. 4, lines 34-61 – describe a dynamic process).

Remarks and Response to Arguments

a. Applicant has argued that the combination of the Dan and Astle references does not disclose reallocating bandwidth according to a file attribute of data requested. Examiner agrees, and has applied the Vaid reference in rejecting the claims. Notably, Vaid discloses that bandwidth can be allocated in a system according to file attributes, as described in the claim rejections above.

b. Note on the phrase “reallocate bandwidth assigned to users connected to said server.”

This phrase, as used in the claims does not limit the claimed invention to requiring that particular users are each assigned a particular bandwidth. The phrase is not so narrow. Instead, the phrase, as broadly interpreted, simply requires that the server system assigns some amount of bandwidth to the users *as a whole*. The system taught by Dan discloses that the server reserves a certain portion of its bandwidth for users who request multimedia files, and further discloses that the bandwidth is

Art Unit: 2153

"rebalanced" upon receipt of a new request from a user. See col. 4, lines 32-61. As such, the claimed feature is anticipated by Dan.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is 703-306-3041. The examiner can normally be reached from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



FRANTZ B. JEAN
PRIMARY EXAMINER

BE
September 22, 2004